



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,470	01/06/2004	Yusuke Ishihara	Q79189	2344

23373 7590 12/30/2005
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
----------	--------------

3654

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/751,470	Applicant(s) ISHIHARA ET AL.	
	Examiner Scott Haugland	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita (European Patent Application No. 0 926 675) in view of Del Genio et al (U.S. Pat. No. 6,034,850) and the admitted prior art of Fig. 7A and page 17, line 18 through page 18, line 17 of the specification.

Morita discloses a magnetic tape cartridge comprising a cartridge case formed by fastening upper and lower cases together and having a tape leader opening, a single tape reel holding magnetic tape, a tape leader pin detachably held in an upright state between the upper and lower cases. The tape leader pin has axially opposite flanges.

Morita does not disclose that the upper and lower cases are made of synthetic resin or that the tape leader pin is 18.7 mm long. Morita does not disclose that the flanges are 1.1 mm thick as recited in claim 7.

Del Genio et al teaches forming cartridge cases of synthetic resin.

The admitted prior art teaches providing a tape cartridge with magnetic tape having a width of 14 mm and a leader pin having a length of 19.46 mm.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the upper and lower cases of Morita of synthetic resin as taught by Del Genio et al to form an inexpensive, non-magnetic housing for the magnetic tape.

It would have been a matter of obvious engineering choice to make the leader pin 18.7 mm long since it would have been within the level of skill of an ordinary artisan to determine a suitable leader pin length, an 18.7 mm long leader pin being adequately long to accommodate conventional 14 mm wide tape. Alternatively, it would have been obvious to provide a cartridge having dimensions scaled down from those of the cartridge of the admitted prior art so that the leader pin is 18.7 mm long in order to produce a more compact tape cartridge. With regard to claim 7, it would have been a matter of obvious engineering choice to make the flanges 1.1 mm thick. Due to the predictability of the effects of various changes in the dimensions of tape cartridges and leader pin, it would have been clear to an ordinary artisan that an operable tape cartridge having a leader pin with the claimed dimensions could be constructed and would be useful for recording and reproducing data. No new and unexpected results are seen to have resulted from selection of a length of 18.7 mm for the leader pin or 1.1 mm for the flange thickness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morita in view of Del Genio et al and the admitted prior art as applied to claim 1 above, and further in view of Martin et al (U.S. Pat. No. 5,868,338).

Morita does not disclose U-shaped clips for fastening the upper and lower cases together.

Martin et al teaches connecting upper and lower cases of a cartridge together using U-shaped clips 112 (Fig. 2) or 118 (Fig. 8) located near a tape leader opening.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Morita with a U-shaped clip near a tape leader opening for connecting the upper and lower cases as taught by Martin et al to facilitate assembly of the cartridge.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita in view of Tanaka et al (U.S. Pat. No. 5,180,118).

Morita is described above.

Morita does not disclose that the upper and lower cases are made of synthetic resin or that there is a metal reinforcing member embedded in one of the cases.

Tanaka et al teaches forming a tape cartridge case by fastening upper and lower cases 1 (Figs. 6-8) of a main body 10 of synthetic resin (col. 7, lines 44-45) together. Tanaka et al teaches providing the tape cartridge case with embedded reinforcement members 2, 4, 26, 28 forming an outermost surface of the cartridge case that provide the cartridge case with rigidity and have a low coefficient of friction (col. 7, lines 37-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the upper and lower cases of Morita of synthetic resin and provide it with embedded reinforcement members forming an outer surface of the cases as taught by Tanaka et al to provide a cartridge having high rigidity and having low friction surfaces for contact with tape recording devices. It would have been further obvious to make the reinforcement members of metal since an ordinary artisan would have known that metals would provide the disclosed properties of high rigidity and low friction coefficient and since the hatching of the reinforcement members 2, 4 in Figs. 6-8 of Tanaka et al indicates a metal.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morita in view of Tanaka et al as applied to claim 4 above, and further in view of Martin et al.

Morita does not disclose U-shaped clips for fastening the upper and lower cases together.

Martin et al teaches connecting upper and lower cases of a cartridge together using U-shaped clips 112 (Fig. 2) or 118 (Fig. 8) located near a tape leader opening.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Morita with a U-shaped clip near a tape leader opening for connecting the upper and lower cases as taught by Martin et al to facilitate assembly of the cartridge.

Response to Arguments

Applicants' arguments filed 9/28/05 have been fully considered but they are not persuasive.

Applicants argue that the combination of Morita, Del Genio, and the admitted prior art does not teach the claimed tape leader pin length of 18.7 mm recited in claim 1. However, an ordinary artisan would have been capable of determining a suitable tape leader pin length for use with a given cassette. It would have been clear to an ordinary artisan that the conventional tape cartridge (admitted prior art of Fig. 7A) may be scaled down in size so that the resulting leader pin length is 18.7 mm. It would have been obvious to do so, for example, to provide a more compact tape cartridge. It would also have been obvious to make the leader pin 18.7 mm long for use with conventional 14 mm wide tape since this clearly gives adequate length to provide flanges to accommodate tape of this width.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicants argue that the side frame members taught by Tanaka would necessarily cover the tape leader opening if applied to the magnetic tape cartridge of Morita. However, an ordinary artisan would appreciate the separate teaching of Tanaka relating to forming a strong composite tape cartridge structure. An ordinary artisan would, also, know not to cover the tape outlet as this would obviously make the cartridge of Morita inoperable. In addition, Tanaka does teach applying the metal reinforcing members without blocking a tape access opening in the cartridge (note openings in reinforcing member 8 in Fig. 2). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any


Art Unit: 3654

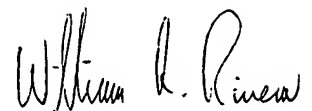
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


sjh
12/14/05



**WILLIAM A. RIVERA
PRIMARY EXAMINER**